109

What is claimed is:

1. A compound of formula I, a pharmaceutically acceptable salt thereof:

wherein

5

R¹ is selected from C₃₋₆alkyl, C₆₋₁₀aryl, C₂₋₉heteroaryl, C₆₋₁₀aryl-C₁₋₄alkyl, C₂₋₉heteroaryl-C₁₋₄alkyl, C₃₋₁₀cycloalkyl, C₃₋₁₀cycloalkyl-C₁₋₄alkyl, R⁸-C(=O)-,

R⁸-S(=O)₂-, R⁸-S(=O)-, R⁸-NHC(=O)-, R⁸-C(=S)- and R⁸-NH-C(=S)-, wherein R⁸ is selected from C₃₋₆alkyl, C₆₋₁₀aryl, C₂₋₉heteroaryl, C₆₋₁₀aryl-C₁₋₄alkyl, C₂₋₉heteroaryl-C₁₋₄alkyl, C₂₋₉heteroaryl-C₁₋₄alkyl, wherein said C₃₋₆alkyl, C₆₋₁₀aryl, C₂₋₉heteroaryl-C₁₋₄alkyl, C₂₋₉heteroaryl-C₁₋₄alkyl, C₃₋₁₀cycloalkyl, and C₃₋₁₀cycloalkyl-C₁₋₄alkyl used in defining R¹ and R⁸ are optionally substituted with one or more groups selected from -R, -NO₂, -OR, -Cl, -Br, -I, -F, -CF₃, -C(=O)R, -C(=O)OH, -NH₂, -SH, -NHR, -NR₂, -SR, -SO₃H, -SO₂R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR₂, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, selected from -H, C₁₋₆alkyl and phenyl;

 R^2 is selected from -H and C_{1-6} alkyl optionally substituted with one or more groups selected from halogen, -CF₃, -OH, C_{1-3} alkoxy, and halogen; and

 R^3 is selected from -H, C_{1-6} alkyl-O-C(=O)-, C_{1-6} alkyl, C_{3-6} cycloalkyl, and C_{3-6} cycloalkyl- C_{1-4} alkyl, wherein said C_{1-6} alkyl-O-C(=O)-, C_{1-6} alkyl, C_{3-6} cycloalkyl, and C_{3-6} cycloalkyl- C_{1-4} alkyl are optionally substituted with one or more groups selected from C_{1-6} alkyl, halogenated C_{1-6} alkyl, -NO₂, -CF₃, C_{1-6} alkoxy and halogen.

110

2. A compound according to claim 1, wherein

 R^1 is selected from C_{3-6} alkyl, C_{6-10} aryl, C_{2-6} heteroaryl, C_{6-10} aryl- C_{1-4} alkyl, C_{2-6} heteroaryl- C_{1-4} alkyl, C_{3-10} cycloalkyl, C_{3-10} cycloalkyl- C_{1-4} alkyl, wherein said C_{3-6} alkyl, C_{6-10} aryl, C_{2-6} heteroaryl, C_{6-10} aryl- C_{1-4} alkyl, C_{2-6} heteroaryl- C_{1-4} alkyl,

5 C₃₋₁₀cycloalkyl, C₃₋₁₀cycloalkyl-C₁₋₄alkyl are optionally substituted with one or more groups selected from C₁₋₄alkyl, halogen, -CF₃, -OH, C₁₋₃alkoxy, phenoxy, and halogen;

 R^2 is selected from –H and C_{1-3} alkyl; and R^3 is selected from –H and C_{1-6} alkyl-O-C(=O)-.

10

15

3. A compound according to claim 2,

wherein R^1 is R^9 -CH₂-, wherein R^9 is selected from phenyl, pyridyl, thienyl, furyl, imidazolyl, triazolyl, pyrrolyl, thiazolyl, N-oxido-pyridyl, benzyl, pyridylmethyl, thienylmethyl, furylmethyl, imidazolylmethyl, triazolylmethyl, pyrrolylmethyl, thiazolylmethyl and N-oxido-pyridylmethyl, optionally substituted with one or more groups selected from C_{1-4} alkyl, halogen, -CF₃, -OH, C_{1-3} alkoxy, phenoxy and halogen; and

R² and R³ are hydrogen.

20 4. A compound according to claim 3,

wherein R⁹ is selected from benzyl, phenyl, pyridyl, thienyl, furyl, imidazolyl, pyrrolyl and thiazolyl, optionally substituted with one or more groups selected from C₁₋₄alkyl, halogen, -CF₃, -OH, C₁₋₃alkoxy, phenoxy, and halogen.

- 25 5. A compound according to claim 4, wherein wherein R⁹ is selected from benzyl, phenyl, pyridyl, thienyl, furyl, imidazolyl, pyrrolyl and thiazolyl.
 - 6. A compound according to claim 1, wherein

R¹ is selected from C₃₋₆alkyl, C₃₋₁₀cycloalkyl, and C₃₋₁₀cycloalkyl-C₁₋₄alkyl, wherein said C₃₋₆alkyl, C₃₋₁₀cycloalkyl, and C₃₋₁₀cycloalkyl-C₁₋₄alkyl are optionally

111

substituted with one or more groups selected from C₁₋₄alkyl, halogen, -CF₃, -OH, C₁₋₃alkoxy, phenoxy, and halogen;

R² is -H or C₁₋₃alkyl; and

R³ is -H, C₁₋₆alkyl, C₃₋₆cycloalkyl, and C₃₋₆cycloalkyl-C₁₋₄alkyl, wherein said C₁₋₆alkyl, C₃₋₆cycloalkyl, C₃₋₆cycloalkyl-C₁₋₄alkyl are optionally substituted with one or more groups selected from C₁₋₄alkyl, halogen, -CF₃, -OH, C₁₋₃alkoxy, phenoxy, and halogen.

- 7. A compound according to claim 6, wherein
- 10 R¹ is selected from 1-propyl, 2-propyl, 1-butyl, 2-butyl, t-butyl, 2-methyl-1-propyl, cyclopentyl, cyclohexyl, cycloheptyl, cyclooctyl, and cyclononyl;

R² is selected from –H, methyl, ethyl, 1-propyl and 2-propyl; and

R³ is selected from –H, methyl, ethyl, allyl, 3,3-dimethyl-allyl, cyclopropylmethyl, 2-methoxy-ethyl, and 3-methoxy-1-propyl.

15

20

30

8. A compound according to claim 1, wherein

 R^1 is selected from R^8 -C(=O)-, R^8 -S(=O)₂-, R^8 -S(=O)-, R^8 -NHC(=O)-, R^8 -C(=S)- and R^8 -NH-C(=S)-, wherein R^8 is selected from $C_{3.6}$ alkyl, $C_{6.10}$ aryl,

C₂₋₆heteroaryl, C₆₋₁₀aryl-C₁₋₄alkyl, C₂₋₆heteroaryl-C₁₋₄alkyl, C₃₋₁₀cycloalkyl, and C₃₋₁₀cycloalkyl-C₁₋₄alkyl; wherein said C₃₋₆alkyl, C₆₋₁₀aryl, C₂₋₆heteroaryl, C₆₋₁₀aryl-C₁₋₄alkyl, C₂₋₆heteroaryl-C₁₋₄alkyl, C₃₋₁₀cycloalkyl, and C₃₋₁₀cycloalkyl-C₁₋₄alkyl are

optionally substituted with C_{1-4} alkyl, halogen, -CF₃, -OH, C_{1-3} alkoxy, phenoxy, and halogen;

R² is -H; and

- 25 R^3 is selected from -H and C_{1-6} alkyl-O-C(=O)-.
 - 9. A compound according to claim 8, wherein

R⁸ is selected from phenyl, benzyl, phenethyl and cyclohexyl, wherein said phenyl, benzyl, phenethyl and cyclohexyl are optionally substituted with one or more groups selected from methyl, methoxy and halogen.

10. A compound according to claim 1, wherein the compound is selected from:

diethylbenzamide;

```
N,N-diethyl-4-((S)piperazin-1-yl{3-[(1,3-thiazol-2-
     ylmethyl)amino]phenyl}methyl)benzamide;
     N,N-diethyl-4-((R)-piperazin-1-yl{3-[(1,3-thiazol-2-
5
     ylmethyl)amino]phenyl}methyl)benzamide;
     4-[(S)-[3-(benzylamino)phenyl](piperazin-1-yl)methyl]-N,N-diethylbenzamide;
     N,N-diethyl-4-((R)-piperazin-1-yl{3-[(thien-2-
     ylmethyl)amino]phenyl}methyl)benzamide;
     N,N-diethyl-4-((S)-piperazin-1-yl{3-[(thien-2-
10
     ylmethyl)amino]phenyl}methyl)benzamide;
     N,N-diethyl-4-[(S)-{3-[(2-furylmethyl)amino]phenyl}(piperazin-1-
     yl)methyl]benzamide;
     4-[(R)-[3-(benzylamino)phenyl](piperazin-1-yl)methyl]-N,N-diethylbenzamide;
     N,N-diethyl-4-[(R)-{3-[(2-furylmethyl)amino]phenyl}(piperazin-1-
     yl)methyl]benzamide;
15
     N,N-diethyl-4-((R)-piperazin-1-yl{3-[(thien-3-
     ylmethyl)amino]phenyl}methyl)benzamide;
      N,N-diethyl-4-((S)-piperazin-1-yl{3-[(thien-3-
      ylmethyl)amino]phenyl}methyl)benzamide;
20
      N,N-diethyl-4-[(R)-{3-[(3-furylmethyl)amino]phenyl}(piperazin-1-
      yl)methyl]benzamide;
      N,N-diethyl-4-[(R)-{3-[(2-phenylethyl)amino]phenyl}(piperazin-1-
      yl)methyl]benzamide;
      4-[(R)-{3-[(cyclohexylmethyl)amino]phenyl}(piperazin-1-yl)methyl]-N,N-
25
      diethylbenzamide;
      N,N-diethyl-4-[(R)-piperazin-1-yl(3-{[4-
      trifluoromethyl)benzyl]amino}phenyl)methyl]benzamide;
      4-[(R)-{3-[(cyclopentylmethyl)amino]phenyl}(piperazin-1-yl)methyl]-N,N-
      diethylbenzamide;
      4-[(S)-{3-[(cyclohexylmethyl)amino]phenyl}(piperazin-1-yl)methyl]-N,N-
30
```

- 4-[(R)-{3-[(cyclohex-1-en-1-ylmethyl)amino]phenyl}(piperazin-1-yl)methyl]-N,N-diethylbenzamide;
- N,N-diethyl-4-[(S)-{3-[methyl(phenyl)amino]phenyl}(piperazin-1-yl)methyl]benzamide;
- 5 N,N-diethyl-4-[(S)-{3-[ethyl(phenyl)amino]phenyl}(piperazin-1-yl)methyl]benzamide;
 - N,N-diethyl-4-[(R)-{3-[methyl(phenyl)amino]phenyl}(piperazin-1-yl)methyl]benzamide;
 - N,N-diethyl-4-[(R)-{3-[ethyl(phenyl)amino]phenyl}(piperazin-1-
- 10 yl)methyl]benzamide;
 - 4-[(R)-{3-[(cyclohexylmethyl)amino]phenyl}(piperazin-1-yl)methyl]-N,N-diethylbenzamide;
 - $\hbox{$4$-[(R)-[3-(cyclopentylamino)phenyl](piperazin-1-yl)methyl]-N,N-diethylbenzamide;}\\$
 - 4-[(R)-[3-(cycloheptylamino)phenyl](piperazin-1-yl)methyl]-N,N-diethylbenzamide;
- 4-[(R)-[3-(cyclooctylamino)phenyl](piperazin-1-yl)methyl]-N,N-diethylbenzamide;
 - 4-[(R)-[3-(cyclononylamino)phenyl](piperazin-1-yl)methyl]-N,N-diethylbenzamide;
 - $\hbox{$4$-[(S)-[3-(cyclohexylamino)phenyl](piperazin-1-yl)methyl]-N,N-diethylbenzamide;}\\$
 - N,N-diethyl-4-[(R)-{3-[(4-methylphenyl)amino]phenyl}(piperazin-1-yl) methyl]benzamide;
- 20 N,N-diethyl-4-[(S)-{3-[(4-methylphenyl)amino]phenyl} (piperazin-1-yl)methyl]benzamide;
 - 4-[(R)-{3-[(3-chlorophenyl)amino]phenyl}(piperazin-1-yl)methyl]-N,N-diethylbenzamide;
 - $4-[(S)-\{3-[(3-chlorophenyl)amino]phenyl\}(piperazin-1-yl)methyl]-N, N-1-(S)-\{3-[(3-chlorophenyl)amino]phenyl\}(piperazin-1-yl)methyl]-N, N-1-(S)-\{3-[(3-chlorophenyl)amino]phenyl\}(piperazin-1-yl)methyl]-N, N-1-(S)-\{3-[(3-chlorophenyl)amino]phenyl\}(piperazin-1-yl)methyl]-N, N-1-(S)-\{3-[(3-chlorophenyl)amino]phenyl\}(piperazin-1-yl)methyl]-N, N-1-(S)-\{3-[(3-chlorophenyl)amino]phenyl\}(piperazin-1-yl)methyl]-N, N-1-(S)-\{3-[(3-chlorophenyl)amino]phenyl\}(piperazin-1-yl)methyl]-N, N-1-(S)-\{3-[(3-chlorophenyl)amino]phenyl\}(piperazin-1-yl)methyl]-N, N-1-(S)-\{3-[(3-chlorophenyl)amino]phenyl]-N, N-1-(S)-[(3-chlorophenyl)amino]phenyl]-N, N-1-(S)-[(3-chlorophenyl)amino]phenyl-N, N-1-(S)-[(3-chlorophenyl)amino]phenyl-N, N-1-(S)-[(3-chlorophenyl)amino]phenyl-N, N-1-(S)-[(3-chlorophenyl)amino]phenyl-N, N-1-(S)-[(3-chlorophenyl)amino]phenyl-N, N-1-(S)-[(3-chlorophenyl)amino]phenyl-N, N-1-(S)-[(3-chlorophenyl)amino]ph$
- 25 diethylbenzamide;
 - 4-[(R)-{3-[(2-fluorophenyl)amino]phenyl}(piperazin-1-yl)methyl]-N,N-diethylbenzamide;
 - 4-[(S)-{3-[(2-fluorophenyl)amino]phenyl}(piperazin-1-yl)methyl]-N,N-diethylbenzamide;
- 4-[(R)-[3-(benzoylamino)phenyl](piperazin-1-yl)methyl]-N,N-diethylbenzamide; N,N-diethyl-4-[(R)-{3-[(phenylacetyl)amino]phenyl}(piperazin-1-yl)methyl]benzamide;

- 4-[(S)-[3-(benzoylamino)phenyl](piperazin-1-yl)methyl]-N,N-diethylbenzamide; N,N-diethyl-4-[(S)-{3-[(phenylacetyl)amino]phenyl}(piperazin-1-yl)methyl]benzamide;
- N,N-diethyl-4-[(R)-{3-[(2-methyl-2-phenylpropanoyl)amino]phenyl}(piperazin-1-
- 5 yl)methyl]benzamide;
 - N,N-diethyl-4-[(R)-(3-{[(3-fluorophenyl)acetyl]amino}phenyl)(piperazin-1-yl)methyl]benzamide;
 - 4-[(R)-{3-[(cyclohexylacetyl)amino]phenyl}(piperazin-1-yl)methyl]-N,N-diethylbenzamide;
- 10 N,N-diethyl-4-[(R)-{3-[(3-phenylpropanoyl)amino]phenyl}(piperazin-1-yl)methyl]benzamide;
 - 4-[(R)-{3-[(cyclohexylcarbonyl)amino]phenyl}(piperazin-1-yl)methyl]-N,N-diethylbenzamide;
 - N,N-diethyl-4-[(R)-{3-[(phenylsulfonyl)amino]phenyl}(piperazin-1-
- 15 yl)methyl]benzamide;
 - 4-[(R)-{3-[(benzylsulfonyl)amino]phenyl}(piperazin-1-yl)methyl]-N,N-diethylbenzamide;
 - N,N-diethyl-4-[(S)-{3-[(phenylsulfonyl)amino]phenyl}(piperazin-1-yl)methyl]benzamide;
- 4-[(R)-{3-[(anilinocarbonyl)amino]phenyl}(piperazin-1-yl)methyl]-N,N-diethylbenzamide;
 - 4-[(R)-{3-[(anilinocarbonothioyl)amino]phenyl}(piperazin-1-yl)methyl]-N,N-diethylbenzamide;
 - N,N-diethyl-4-[(S)-1-piperazinyl[3-(propylamino)phenyl]methyl]benzamide;
- 4-[(S)-[3-(dipropylamino)phenyl]-1-piperazinylmethyl]-N,N-diethylbenzamide;
 N,N-diethyl-4-[(R)-1-piperazinyl[3-(propylamino)phenyl]methyl]benz-amide;
 4-[(R)-[3-(dipropylamino)phenyl]-1-piperazinylmethyl]-N,N-diethylbenzamide;
 N,N-diethyl-4-[(S)-1-piperazinyl[3-[[[4-(3-pyridinyl)phenyl]methyl]-amino]phenyl]methyl]benzamide;
- 30 N,N-diethyl-4-[(S)-[3-[[[4-(1H-imidazol-1-yl)phenyl]methyl]amino]-phenyl]-1-piperazinylmethyl]benzamide;

- *N,N*-diethyl-4-[(S)-1-piperazinyl[3-[(2-quinolinylmethyl)amino]phenyl]-methyl]benzamide;
- 4-[(R)-[3-[(2,2-diphenylethyl)amino]phenyl]-1-piperazinylmethyl]-N,N-diethylbenzamide;
- 5 4-[(R)-[3-[[[4-(1,1-dimethylethyl)phenyl]methyl]amino]phenyl]-1-piperazinylmethyl]-N,N-diethylbenzamide;
 - N,N-diethyl-4-[(R)-[3-[[(4-phenoxyphenyl)methyl]amino]phenyl]-1-piperazinylmethyl]benzamide;
 - N,N-diethyl-4-[(R)-[4-(2-propenyl)-1-piperazinyl)][3-(propylamino)-1-piperazinyl)[3-(propylamino)-1-piperazinyl)[3-(propylamino)-1-piperazinyl)[3-(propylamino)-1-piperazinyl)[3-(propylamino)-1-piperazinyl)[3-(propylamino)-1-piperazinyl)[3-(propylamino)-1-piperazinyl)[3-(propylamino)-1-piperazinyl)[3-(propylamino)-1-piperazinyl)[3-(propylamino)-1-piperazinyl)[3-(propylamino)-1-piperazinyl)[3-(propylamino)-1-piperazinyl)[3-(propylamino)-1-piperazinyl)[3-(propylamino)-1-piperazinyl)[3-(propylamino)-1-piperazinyl)[3-(propylamino)-1-piperazinyl)[3-(propylamino)-1-piperazinyl)[3-(propylamino)-1-piperazinyl)[3-(propylamino)-1-piperazinyl)[3-(propylamino)-1-piperazinyl][3-(propylamino)-1-piperazinyl)[3-(propylamino)-1-piperazinyl][3-(prop
- 10 phenyl]methyl]benzamide;
 - 4-{(R)-(3-aminophenyl)[4-(2-methoxyethyl)piperazin-1-yl]methyl}-N,N-diethylbenzamide;
 - 4-{(R)-(3-aminophenyl)[4-(3-methoxypropyl)piperazin-1-yl]methyl}-N,N-diethylbenzamide;
- 15 N,N-diethyl-4-[(R)-[4-(2-methoxyethyl)-1-piperazinyl][3-(propylamino)-phenyl]methyl]benzamide;
 - *N,N*-diethyl-4-[(*R*)-[4-(3-methoxypropyl)-1-piperazinyl][3-(propylamino)phenyl]methyl]benzamide;
 - 4-[(S)-[3-(cycloheptylamino)phenyl](piperazin-1-yl)methyl]-N,N-diethylbenzamide;
- 4-[(S)-[3-(cyclooctylamino)phenyl](piperazin-1-yl)methyl]-N,N-diethylbenzamide; N,N-diethyl-4-[(S)-{3-[(3-phenylpropanoyl)amino]phenyl}(piperazin-1-yl)methyl]benzamide;
 - 4-[(R)-(3-aminophenyl)[4-(2-propenyl)-1-piperazinyl]methyl]-N,N-diethylbenzamide;
- 4-[(R)-(3-aminophenyl)[4-(3-methyl-2-butenyl)-1-piperazinyl]methyl]-N,N-diethyl-benzamide;
 - 4-[(R)-(3-aminophenyl)[4-(cyclopropylmethyl)-1-piperazinyl]methyl]-N,N-diethylbenzamide;
 - N,N-diethyl-4-[(R)-[4-(2-propenyl)-1-piperazinyl][3-[(2-
- thienylmethyl)amino]phenyl]methyl]-benzamide;

 N,N-diethyl-4-[(R)-[4-(3-methyl-2-butenyl)-1-piperazinyl][3-[(2-thienylmethyl)amino]phenyl]methyl]-benzamide;

116

- 4-[(R)-[4-(cyclopropylmethyl)-1-piperazinyl][3-[(2-thienylmethyl)amino]phenyl]methyl]-N,N-diethyl-benzamide;
 4-{(S)-[3-(cyclohexylamino)phenyl][4-(cyclopropylmethyl)piperazin-1-yl]methyl}-N,N-diethylbenzamide;
- 5 4-[(S)-[3-(cyclohexylamino)phenyl](4-propylpiperazin-1-yl)methyl]-N,N-diethylbenzamide;
 - 4-[(S)-[3-(cyclohexylamino)phenyl](4-ethylpiperazin-1-yl)methyl]-N,N-diethylbenzamide;
 - 4-{(S)-(4-allylpiperazin-1-yl)[3-(cyclohexylamino)phenyl]methyl}-N,N-
- 10 diethylbenzamide;
 - 4-[(S)-{3-[(cyclohexylcarbonyl)amino]phenyl}(piperazin-1-yl)methyl]-N,N-diethylbenzamide;
 - 4-[(S)-{3-[(cyclohexylacetyl)amino]phenyl}(piperazin-1-yl)methyl]-N,N-diethylbenzamide;
- 4-[(S)-{3-[cyclohexyl(methyl)amino]phenyl}(piperazin-1-yl)methyl]-N,N-diethylbenzamide;
 - 4-[(R)-{3-[cyclohexyl(methyl)amino]phenyl}(piperazin-1-yl)methyl]-N,N-diethylbenzamide;
 - enantiomers thereof; and pharmaceutically acceptable salts thereof.

20

- 11. A compound according to any one of claims 1-10 for use as a medicament.
- 12. The use of a compound according to any one of claims 1-10 in the manufacture of a medicament for the therapy of pain, anxiety or functional gastrointestinal disorders.
- 13. A pharmaceutical composition comprising a compound according to any one of claims 1-10 and a pharmaceutically acceptable carrier.
- 30 14. A method for the therapy of pain in a warm-blooded animal, comprising the step of administering to said animal in need of such therapy a therapeutically effective amount of a compound according to any one of claims 1-10.

- 15. A method for the therapy of functional gastrointestinal disorders in a warm-blooded animal, comprising the step of administering to said animal in need of such therapy a therapeutically effective amount of a compound according to any one of claims 1-10.
- 16. A method for the therapy of anxiety in a warm-blooded animal, comprising the step of administering to said animal in need of such therapy a therapeutically effective amount of a compound according to any one of claims 1-10.

10

5

17. A process for preparing a compound of formula II, comprising:

a) reacting a compound of formula III:

15

with a compound of formula IV

- 20 in the presence of a base having a pKa of more than 15 wherein
 - X is a halogen.

118

18. A process for preparing a compound of formula VI:

5 comprising: reacting a compound of formula II

with a compound of formula VII

10

15

in the presence of SOX_2 to form the compound of formula VI, wherein

R³ is selected from -H, C₁₋₆alkyl-O-C(=O)-, C₁₋₆alkyl, C₃₋₆cycloalkyl, and C₃₋₆cycloalkyl-C₁₋₄alkyl, wherein said C₁₋₆alkyl-O-C(=O)-, C₁₋₆alkyl, C₃₋₆cycloalkyl, and C₃₋₆cycloalkyl-C₁₋₄alkyl are optionally substituted with one or more groups selected from C₁₋₆alkyl, halogenated C₁₋₆alkyl, -NO₂, -CF₃, C₁₋₆alkoxy and halogen; and X is halogen.

119

19. A process for preparing a compound of formula I,

comprising: reacting a compound of formula VIII,

νШ

with R⁹-CHO in the presence of a reducing agent to form the compound of formula I: wherein

R¹ is R⁹-CH₂-, wherein R⁹ is selected from phenyl, pyridyl, thienyl, furyl,
imidazolyl, triazolyl, pyrrolyl, thiazolyl, N-oxido-pyridyl, benzyl, pyridylmethyl,
thienylmethyl, furylmethyl, imidazolylmethyl, triazolylmethyl, pyrrolylmethyl,
thiazolylmethyl and N-oxido-pyridylmethyl, optionally substituted with one or more
groups selected from C₁₋₄alkyl, halogen, -CF₃, -OH, C₁₋₃alkoxy, phenoxy and
halogen;

R² is -H; and

5

15

 R^3 is selected from C_{1-6} alkyl-O-C(=O)-, C_{1-6} alkyl, C_{3-6} cycloalkyl, and C_{3-6} cycloalkyl- C_{1-4} alkyl, wherein said C_{1-6} alkyl-O-C(=O)-, C_{1-6} alkyl, C_{3-6} cycloalkyl, and C_{3-6} cycloalkyl- C_{1-4} alkyl are optionally substituted with one or more groups selected from C_{1-6} alkyl, halogenated C_{1-6} alkyl, -NO₂, -CF₃, C_{1-6} alkoxy and halogen.

20. A process for preparing a compound of formula IX,

5 comprising: reacting a compound of formula VIII,

УШ

with R⁸-Y-X or R⁸-Y-O-Y-R⁸ to form the compound of formula IX: wherein

10 X is halogen;

Y is selected from -C(=O)- and $-S(=O)_2$ -;

 R^8 is selected from C_{3-6} alkyl, C_{6-10} aryl, C_{2-6} heteroaryl, C_{6-10} aryl- C_{1-4} alkyl, C_{2-6} heteroaryl- C_{1-4} alkyl, C_{3-10} cycloalkyl, and C_{3-10} cycloalkyl- C_{1-4} alkyl; wherein said C_{3-6} alkyl, C_{6-10} aryl, C_{2-6} heteroaryl, C_{6-10} aryl- C_{1-4} alkyl, C_{2-6} heteroaryl- C_{1-4} alkyl,

C₃₋₁₀cycloalkyl, and C₃₋₁₀cycloalkyl-C₁₋₄alkyl are optionally substituted with C₁₋₄alkyl, halogen, -CF₃, -OH, C₁₋₃alkoxy, phenoxy, and halogen; and

 R^3 is selected from C_{1-6} alkyl-O-C(=O)-, C_{1-6} alkyl, C_{3-6} cycloalkyl, and C_{3-6} cycloalkyl- C_{1-4} alkyl, wherein said C_{1-6} alkyl-O-C(=O)-, C_{1-6} alkyl, C_{3-6} cycloalkyl,

121

and C_{3-6} cycloalkyl- C_{1-4} alkyl are optionally substituted with one or more groups selected from C_{1-6} alkyl, halogenated C_{1-6} alkyl, -NO₂, -CF₃, C_{1-6} alkoxy and halogen.

21. A process for preparing a compound of formula IX,

comprising: reacting a compound of formula VIII,

5

νш

with R⁸-Z to form the compound of formula IX: wherein

Z is selected from -NCO and -NCS;

Y is selected from -C(=O)NH- and -C(=S)NH-;

R⁸ is selected from C₃₋₆alkyl, C₆₋₁₀aryl, C₂₋₆heteroaryl, C₆₋₁₀aryl-C₁₋₄alkyl,

C₂₋₆heteroaryl-C₁₋₄alkyl, C₃₋₁₀cycloalkyl, and C₃₋₁₀cycloalkyl-C₁₋₄alkyl; wherein said

C₃₋₆alkyl, C₆₋₁₀aryl, C₂₋₆heteroaryl, C₆₋₁₀aryl-C₁₋₄alkyl, C₂₋₆heteroaryl-C₁₋₄alkyl,

C₃₋₁₀cycloalkyl, and C₃₋₁₀cycloalkyl-C₁₋₄alkyl are optionally substituted with C₁₋₄alkyl, halogen, -CF₃, -OH, C₁₋₃alkoxy, phenoxy, and halogen; and

122

 R^3 is selected from C_{1-6} alkyl-O-C(=O)-, C_{1-6} alkyl, C_{3-6} cycloalkyl, and C_{3-6} cycloalkyl- C_{1-4} alkyl, wherein said C_{1-6} alkyl-O-C(=O)-, C_{1-6} alkyl, C_{3-6} cycloalkyl, and C_{3-6} cycloalkyl- C_{1-4} alkyl are optionally substituted with one or more groups selected from C_{1-6} alkyl, halogenated C_{1-6} alkyl, -NO₂, -CF₃, C_{1-6} alkoxy and halogen.